CERTIFICATE OF MAILING BY "EXPRESS MAIL" I hereby certify that this correspondence is being deposited with the US Postal Services "Express Mail Post Office to Addressee" service under 37 CFR 1.10, Express Mail Label No. EL 342 836 512 US and addressed to the Commissioner for Patents, Box Patent Application, P. O. Box 2327, Arlington, VA 22202 on the date shown below: Date: December 18, 2001 Docket No. GC558D3 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE In re Application of Group Art Unit: Unassigned Manoj Kumar Examiner: Unassigned Serial No.: Unassigned Filed: Herewith Production of Ascorbic Acid For: Information Disclosure Statement Commissioner of Patents U.S. Patent and Trademark Office P. O. Box 2327 Arlington, VA 22202 Sir: Applicants submit herewith patents, publications or other information (listed on the attached Form PTO-1449 and attached thereto) of which they are aware, that they believe may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR §1.56. This Information Disclosure Statement: (a) accompanies the new patent application submitted herewith. 37 CFR §1.97(a). (b) is filed within three months after the filing date of the application or within three months after the date of entry into the national stage of a PCT application as set forth in 37 CFR §1.491.

(c) as far as is known to the undersigned, is filed before the mailing date of a

(d) is filed after the first Office Action and more than three months after the application filing date or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final

first Office Action on the merits.

, ,	rejection or a notice of allowance, whichever occurs first, and is accompanied by either the fee (\$240) set forth in 37 CFR §1.17(p) or a certification as specified in 37 CFR §1.97(e), as checked below. Authorization to charge Deposit Account No. 07-1048 in the amount of \$240.00 to cover the cost of this Information Disclosure Statement is provided in the Transmittal Letter submitted herewith in duplicate.
:	(e) is filed after the mailing date of either a final rejection or a notice of allowance, whichever occurred first, and is accompanied by authorization (in the Transmittal Letter submitted herewith in duplicate) to charge Deposit Account No. 07-1048 the fee (\$240) set forth in 37 CFR §1.17(I)(1) and a certification as specified in 37 CFR §1.97(e), as checked below. This document is to be considered as a petition requesting consideration of the Supplemental Information Disclosure Statement.
-	exes (d) or (e) is checked above, the following "certification" under 37 CFR
§1.97(e) may r	need to be completed.]The undersigned certifies that:
	Each item of information contained in the Information Disclosure Statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
1	No item of information contained in this Information Disclosure Statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.
A copy of the it	ems on Form PTO-1449 is supplied: PCT International Search Report for
	699, filed December 3, 1999, with attached patents and publications. □ ☑ none ☐ only those listed below:
PTO-1449 are a prior applicat	or publication(s) which are marked with an asterisk (*) on the attached Form not supplied because they were previously cited by or submitted to the Office in ion, Serial No. 09/205,874 filed January 9, 2001, and relied upon in this an earlier filing date under 35 USC 120.
	anation of relevance of the items listed on PTO-1449 is:

given	for each listed item
	given for only non-English language listed item(s)
_	in the form of an English language copy of a Search Report from a gn patent office, issued in a counterpart application, which refers to the ant portions of the references.

The Examiner is reminded that a "concise explanation of the relevance" of the submitted prior art "may be nothing more than identification of the particular figure or paragraph of the patent or publication which has some relation to the claimed invention." MPEP §609.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR §1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR §1.97(b), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR §1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR §1.98 and MPEP §609 and the Examiner is respectfully requested to consider the listed references.

Respectfully submitted,

Date: December 18, 2001

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		INFO	RMATION DISCL	OSURE CITATION			
Attorney Docket N	lo.: GC558D3			Serial No.: Unassigned			<u> </u>
Applicant: Kumar							a 5
Filing Date: Unas	signed			Group: Unassigned			δ.1.
Page1_ of	2			Date of this Submission: De	cember 18, 2001		20.
			US PATENT DO	DCUMENTS			10
Examiner's	Document					Sub-	Filing 5
Initial	Number	Date	Name		Class	Class	Date
	*4,595,659	Jun. 17, 1986	Roland et al.				
	*4.757,012	Jul. 12,1988	Estell et al.				
	*4,758,514	Jul. 10, 1988	Light et al.				
	*4,916,068	Apr. 10, 1990	Roland et al.				
	*5,004,690	Apr. 2, 1991	Light et al.				
	*5,032,514	Jul. 16, 1991	Anderson et al				
		F(OREIGN PATENT	DOCUMENTS			
Examiner's	Document					Sub-	Translation
Initials	Number	Date	Country		Class	Class	Yes/No
	*WO 85/01745	25 April 1985	PCT			i	
	*WO 87/00863 A	12 Feb 1987	РСТ				
	*WO 96/12846	2 May 1996	PCT				-1
			OTHER DOC	UMENTS			
Examiner's							
Initials	Author, Title, Date, Pertine	nt Pages, etc.		40			
	*Bleeg, "L-Ascorbic Acid in Y W. Junk - Den Haag, 1966 p		f L-Galactono-γ-La	actone Oxidase from the Mitocha	ndria", <i>Enzymolo</i>	gia acta biocatalyt	tica, Uitgeverij Dr.
	*Bleeg, "Biosynthesis of Asco	orbate in Yeast", Eur	r. J. Biochem, 127	7, 391-396 (9182) FEBS 1982			
	*Bunton et al., "The Determin	nation of Ascorbic ar	nd Erythorbic Acid	s in Meat Products", J. Assoc. Po	ubl. Analysts , 19	79, 17, 105,-110	
	*Chemical Abstract, V. 84 (5) JP 50 022113 b (Takeda Che), 2 Feb. 1976, Colur emical Industries, LT	mbus Ohio, US, A D., Japan) 28 Jul	bstract No. 29189, OBATA, YAS y 1975	UO et al: L-Asco	orbic acid XP0021	35678 abstract and
	*Costamagna et al., "Ascorbi	c acid specific utiliza	ation by some yea	sts", Can. J. Microbiol. Vol. 32,	June 12, 1986, pp	756-758	
	*Frey et al., "The Molecular E	Biology of Inc Q Plas	mids", Replication	n Proteins of the IncQ Plasmid R	SF1010, pp 79-94	1	
	*Frey et al., "Replication and	copy number contro	ol of the broad-hos	st-range plasmid RSF1010", Gen	e, 113 (1992) 10	1-106	
	*Grindley et al., "Conversion Applied and Environmental N			intermediate in L-Acorbate Synth 5	esis, by a Recom	ibinant Strain of E	rwinia citreus,
	*Haller et al., "Enzymatic Syr DE, Weinheim, V. 4, 1 Janua	ithesis of L-Ascorbic ry 1990, pp. 233-23	Acid 3 L-Galact 6, XP000646759	ono-Gamma-Lactone Oxidase fr ISSN: 0934-3792	om Yeasts", Deci	hema Biotechnolo	gy Conferences,

*Heick at al., "Occurrence of ascorbic acid in the yeast Lipomyces starkeyi", Canadian Journal of Biochemistry, vol., 47, 1969, pp 752-753

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not

Examiner

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Initials

Examiner's

considered. Include copy of this form with next communication to applicant.

Author, Title, Date, Pertinent Pages, etc.

Date Considered

INFORMATION DISCLOSURE CITATION

Attorney Docket No.: GC558D3	Serial No.: Unassigned
Applicant: Kumar	
Filing Date: Herewith	Group: Unassigned
Page 2 of 2	Date of this Submission: December 18, 2001

US PATENT DOCUMENTS

Examiner's	Document				Sub-	Filing
Initial	Number	Date	Name	Class	Class	Date

FOREIGN PATENT DOCUMENTS

Examiner's	Document				Sub-	Translation
Initials	Number	Date	Country	Class	Class	Yes/No

	OTHER DOCUMENTS						
Examiner's							
Initials	Author, Title, Date, Pertinent Pages, etc.						
	*Izumi et al., "NADH production from NAD using a Formate Dehydrogenase System with Cells of a Methanol-Utilizing Bacterium", J. Ferment. Technol., vol. 61, No. 2, p. 135-142, 1983						
	*Kulbe et al., "Enzyme-Catalyzed Production of Mannitol and Gluconic Acid", Annals of the New York Academy of Sciences, volume 506, 1987, pp 552-568						
	*Loewus et al., "Conversion of D-Arabinose to D-erythroascorbic Acid and Oxalic Acid in Sclerotinia Sclerotiorum," Biochemical and Biophysical Res. Comm., V. 212:1 1995 pp. 196-203						
	*Matsushita et al., "Membrane-Bound D-Gluconate Dehydrogenase from Pseudomonas aeruginosa", J. Biochem, vol. 85, No.5, pp 1173-1181, 1979						
	*McIntire et al., "Identification of the covalently bound flavins of D-gluconate dehydrogenases from Pseudomonas aeruginosa and Pseudomonas fluorescens and of 2-keto-D-gluconate de hydrogenase from Gluconobacter melanogenus", Biochem. J. (1985), 231, 651-654						
	*Murakawa, et al., "Biosynthesis of D-Erythroascorbic Acid by Candida," Agric. Biol. Chem., 41(9), pp. 1799-1800, 1977						
	*Neijssel et al., "Physiological Significance and Bioenergetic Aspects of Glucose Dehydrogenase", Antonie Van Leeuwenhoek, vol 56, 51-61, 1989						
	*Nishikimi et al., "Occurrence in Yeast of L-Galactonolactone Oxidase Which is Similiar to a Key Enzyme for Ascorbic Acid Biosynthesis in Animals, L-Gulonolactone Oxidase", Archives of Biochemistry and Biophysics, vol. 191, No.2, December, pp 479-486, 1978						
	*Pachla et al., "Determination of Ascorbic Acid in Foodstuffs, Pharmaceuticals, and Body Fluids by Liquid Chromatography with Electrochemical Detection", Analytical Chemistry, vol. 48, No. 2, February 1976, pp 364-367						
	*Saito et al., "Cloning of Genes Coding for L-Sorbose and L-Sorbosone Dehydrogenases from Gluconobacter oxydans and Microbial Production of 2-Keto-L-Gulonate, a Precursor of L-Ascorbic Acid, in a Recombinant G. oxydans Strain", Applied and Environmental Microbiology, Feb. 1977, p. 454-460						
	*Shinagawa et al., "2-Keto-D-gluconate Dehydrogenase from Gluconobacter melanogenus, Membrane-Bound, Oxidation-Reduction Enzymes", Methods in Enzymology, vol. 89, pp 194-198, 1991						
	*Simons et al., "Aerobic 2-ketogluconate metabolism of Klebsiella pneumoniae NCTC 418 grown in chemostat culture", Journal of General Microbiology (1991), 137, 1479-1483						
	*Smith at al., Purification and characterization of glucose dehydrogenase from the thermoacidophilic archaebacterium Thermophlasma acidophilum, Biochem. J. (1989), 261, 973-977						
	*Stoshane et al., "Fermentation of Glucose by Acetobacter melanogenus", Biotechnology and Bioengineering, vol. XIX, Pages 459, 465, 1977						
	*Takahashi et al., "Ascorbic Acid Analogs as Indirect Products of Serratia marcescens," Agr. Biol. Chem., 40 (6), pp. 1255-1256, 1976						
	*Truesdell et al., "Pathways for Metabolism of Ketoaldonic Acids in an Erwinia sp.", Journal of Bacteriology, Nov. 1991, V. 173:21 pp. 6651-6656						
Examiner	Date Considered						

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not

considered. Include copy of this form with next communication to applicant. 1449

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